

Clinical Trial Protocol

Iranian Registry of Clinical Trials

13 Jun 2026

The evaluation of the ginger extract gel(ZingiberOfficinale) phonophoresis and pulsed ultrasound on the knee pain and function in patients with moderate degree of knee osteoarthritis

Protocol summary

Summary

Objectives: Osteoarthritis is a common joint inflammatory disease with symptoms like joint stiffness and decreased performance. Knee osteoarthritis prevalence is estimated as 34.19% in Iran. Different physical therapy methods like ultrasound therapy and phonophoresis are used to reduce pain and inflammation. Ginger had been proved to reduce pain and improve performance in patients with knee osteoarthritis in the previous studies. No previous study has evaluated the effects of ginger phonophoresis;so, the aim of this study is to evaluate ginger effects. Design: Randomised Controlled Trial Setting and conduct: Intervention and control groups receive 10 sessions of routine physical therapy but control group receive just ultrasound. Intervention group receive ginger phonophoresis. Participants:Patients diagnosed as knee osteoarthritis with specialist and according to Kelegren-Lawrence method and age beyond 50 years old were assigned into interventional and control groups. Intervention: Intervention group: Hot pack- TENS- Exercise- Ginger phonophoresis Control group: Hot pack- TENS- Exercise- US Main outcome measures variables: Pain (VAS)- KOOS questionnaire- TUGT

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2016061428447N1**
Registration date: **2016-07-31, 1395/05/10**
Registration timing: **registered_while_recruiting**

Last update:

Update count: **0**

Registration date

2016-07-31, 1395/05/10

Registrant information

Name

Amin Kordi Yoosefinejad

Name of organization / entity

Shiraz University of Medical Sciences

Country

Iran (Islamic Republic of)

Phone

+98 71 3626 1081

Email address

yoosefinejad@sums.ac.ir

Recruitment status

Recruitment complete

Funding source

Shiraz University of medical sciences

Expected recruitment start date

2016-05-21, 1395/03/01

Expected recruitment end date

2016-08-22, 1395/06/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

The evaluation of the ginger extract gel(ZingiberOfficinale) phonophoresis and pulsed ultrasound on the knee pain and function in patients with moderate degree of knee osteoarthritis

Public title

the effects of a physical therapy method on knee osteoarthritis

Purpose

Treatment

Inclusion/Exclusion criteria

inclusion criteria: Knee osteoarthritis confirmed with a specialist according to Kelegren-Lawrens method; age beyond 50 years old -Exclusion criteria: Arthroscopy during the last year; Fever over 38 degrees centigrade; Hyaluronate injection during previous 6 months; anticoagulants like aspirin; coagulation and blood diseases like hemophilia; deformities; Lower limb surgery during previous 6 months; systematic disorders as diabetes mellitus; inflammatory arthropaties; soft tissue rheumatism; Inflammatory conditions; Skin sensation disorders; Skin ulcers.

Age

No age limit

Gender

Both

Phase

2-3

Groups that have been masked

No information

Sample size

Target sample size: **40**

Randomization (investigator's opinion)

Randomized

Randomization description**Blinding (investigator's opinion)**

Not blinded

Blinding description**Placebo**

Not used

Assignment

Parallel

Other design features**Secondary Ids**

empty

Ethics committees**1****Ethics committee****Name of ethics committee**

Ethics committee of Shiraz University of medical sciences

Street address

Shiraz, Nemazi Street, Central building of Shiraz university of medical sciences

City

Shiraz

Postal code

14336 - 71348

Approval date

2016-06-13, 1395/03/24

Ethics committee reference number

IR.SUMS.REC.1395.53

Health conditions studied**1****Description of health condition studied**

Knee osteoarthritis

ICD-10 code

M15

ICD-10 code description

Primary generalized (osteo)arthrosis

Primary outcomes**1****Description**

knee performance

Timepoint

before, after the intervention

Method of measurement

Persian version of KOOS questionnaire

Secondary outcomes**1****Description**

pain

Timepoint

before and after the intervention

Method of measurement

VAS scale

Intervention groups**1****Description**

intervention group: hot pack for 20 minutes; TENS for 20 minutes with 100 Hz of frequency and 100 ms duration; Phonophoresis of Zingiber Officinale with 4% concentration, 5 days per week, 10 days and 7 minutes of application

Category

Treatment - Other

2**Description**

Control group: Hot pack for 20 minutes; TENS for 20 minutes with 100 Hz frequency and 100 ms duration; ultrasound in continuous mode for 7 minutes, 5 days a week for 10 days.

Category

Treatment - Drugs

Recruitment centers**1****Recruitment center****Name of recruitment center**

school of rehabilitation of Shiraz university of medical sciences

Full name of responsible person

Amin Kordi Yoosefinejad

Street addressChamran Blvd, Sheikh Abivardi 1 street,
Rehabilitation Faculty, Clinic of Rehabilitation Faculty**City**

Shiraz

+98 71 3626 1081

Fax**Email**

yoosefinejad@sums.ac.ir

Web page address**Sponsors / Funding sources****1****Sponsor****Name of organization / entity**Shiraz University of Medical Sciences, Vice chancellor
of Research**Full name of responsible person**

Amin kordi Yoodefinejad

Street addressVice chancellor for research, 7th floor, Central
building of Shiraz University of Medical Sciences,
Nemazi Street**City**

Shiraz

Grant name**Grant code / Reference number****Is the source of funding the same sponsor
organization/entity?**

Yes

Title of funding sourceShiraz University of Medical Sciences, Vice chancellor of
Research**Proportion provided by this source**

100

Public or private sector*empty***Domestic or foreign origin***empty***Category of foreign source of funding***empty***Country of origin****Type of organization providing the funding***empty***Person responsible for general inquiries****Contact****Name of organization / entity**School of rehabilitation of Shiraz university of medical
sciences**Full name of responsible person**

Amin Kordi Yoosefinejad

Position

PhD of physical therapy

Other areas of specialty/work**Street address**School or Rehabilitation, Sheikh Abivardi 1 street,
Chamran Blvd**City**

Shiraz

Postal code**Phone****Person responsible for scientific
inquiries****Contact****Name of organization / entity**School of rehabilitation of Shiraz university of medical
sciences**Full name of responsible person**

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PhD of physical therapy

Other areas of specialty/work**Street address**School of rehabilitation, Sheikh Abivardi 1 street,
Chamran Blvd**City**

Shiraz

Postal code**Phone**

+98 71 3626 1081

Fax**Email**

yoosefinejad@sums.ac.ir

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yoosefinejad@sums.ac.ir

Web page address**Sharing plan****Deidentified Individual Participant Data Set (IPD)***empty***Study Protocol***empty***Statistical Analysis Plan**

empty
Informed Consent Form
empty
Clinical Study Report
empty

Analytic Code
empty
Data Dictionary
empty